

Materialistic Values and Criminal Thinking among University Students: The Moderating Effects of Social Media Addiction and Self-Control.

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Abstract

This research examined the role of modern-day psychosocial factors like materialistic values, social media addiction, and self-control in directly and indirectly crafting criminal thinking in university students. While these variables are well researched in the context of well-being and behavioral outcomes, the present study seeks to expand the frame of previous studies by investigating how modern-day value orientations, digital engagement patterns, and self-regulatory capacities contribute to the criminogenic cognitions that may lead to a person having deviant or criminal behavior. Using a cross-sectional design, data were collected from 340 undergraduate students aged 18 to 25 years enrolled in the University of Peshawar, a public-sector university. Through convenient sampling, participants completed a questionnaire both online and offline, which included the standardized measures of materialistic values, criminal thinking, social media addiction, and self-control. According to the results of the correlational analysis, there exists a significant positive correlation between materialism values and criminal thinking. Moderation analysis further indicated that social media addiction had significantly strengthened the relationship between materialism and criminal thinking, showing up to 10% variance in enhancing the positive relationship. Likewise, self-control also showed a moderating effect of 10% variance in enhancing the positive relationship between materialism and criminal thinking. This study concluded that unrestricted focus on material wealth, paired with constant use of social media and reduced self-regulatory capacity, increases criminogenic cognitions. These findings highlight the importance of emphasizing value systems, digital habits, and self-control in interventions that are targeted towards preventing deviant thought patterns during emerging adulthood. Overall, this study focuses on the influential role of psychosocial and internal factors on cognitive risk processes, providing guidance for both educational and preventative strategies.

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Introduction

Materialism is often defined as a collection of beliefs and values that connects materialistic things like wealth, possessions, and consumption to psychological constructs like happiness, success, and life satisfaction (Górník, 2020). Materialism has also been reported as an “excessive focus on getting wealth and possessions that shows status” and using them to judge one’s own and others’ worth, which links material objects to the self-worth and perception of a person (Moldes & Ku, 2020). A large-scale Chinese study of 2,648 early adolescents states that both at a specific point

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in time and over a long period of time they saw materialism positively predicting delinquent behavior, e.g., the acts of vandalism, theft, compensated dating, and selling pirated items (Shek et al., 2020). Another study done throughout 3 years found that adolescent materialism was directly and positively related to aggressive behavior over time. (Lv et al., 2023). There also have been research studies that support the idea that the level of materialistic values in a person is heightened by an unrestricted and unregulated use of social media; vice versa, materialism levels also predict high social media use among individuals (Dai et al., 2025). Research has also been found to link self-control to materialism and social media addiction, stating that both of these variables are positively associated among people with low self-control (Yue et al., 2024). Social media addiction has often been defined as a maladaptive psychological dependence on social networking sites that results in significant impairment in daily life functioning and the ability to perform basic activities (Akhtar et al., 2025). Based on the general parts of the model of addiction, many studies described it through six dimensions (Mujica et al., 2022). Salience (the preoccupation, which means social media takes the majority of the thoughts and time), mood modification (it means to use social media in order to change the current mood or escape dealing with it), tolerance (it means needing more time online for the same effect that previously required less time to produce), withdrawal (this refers to the irritability and anxiety that come to the surface when a person is unable to use social media), conflict (it means encountering problems in work, study, relationships, and health due to excessive social media use), and relapse (this refers to the failed attempts to cut down and quit social media due to high dependence, which causes further helplessness) (Henzel & Håkansson, 2021). Research has linked and connected Social media addiction is linked to higher neuroticism, which is a tendency towards negative emotions, and increased mental health problems in college students (Ji, 2024). Excessive or maladaptive reliance on social media has also been seen to trigger or increase symptoms of depression and anxiety, particularly among young people, further continuing its use and expanding its potential negative effects (Castillo et al., 2025). Self-control in psychology is usually defined as the effortful and conscious regulation of impulses, emotions, or habits that is done by avoiding instant gratification in order to achieve longer-term goals or values (Goschke & Job, 2023). The construct of self-control lies within the broader category of self-regulation, but it focuses specifically on avoiding, resisting, and reshaping tempting responses related to immediate pleasures of life. (De Ridder, 2024). Many of the authors agree on the point that self-control is the act of prioritizing a long-term goal rather than fulfilling an immediate gratifying desire when the two conflict. (Colling et al., 2023). Studies have proven how high levels of self-control in a person can aid against uncontrolled, compulsive, and automatic social media checking, whereas low self-control feeds the habit of continuously social media checking. Results also revealed that self-control was negatively related to all the identified types of problematic digital media use, namely problematic Internet use, problematic smartphone use, and problematic Facebook use (Błachnio et al., 2023). Criminal thinking is one of the central concepts in forensic psychology and criminology that is used to explain and describe how certain patterns of thought and cognition support and sustain criminal behavior and actions (Bălan, 2024). Across the forensic psychology literature, we see that criminal thinking is usually defined as a collection of attitudes, values, beliefs, and cognitions that support or justify crime and make a person vulnerable towards committing an offense and guide cognitive decision-making toward violating rules, laws, or social norms (Escrig-Espuig et al., 2022). One of the researchers, Walters, describes the concept of self-control more specifically as cognitions or

thought patterns whose purpose is to start and maintain the behavior related to breaking rules, codes, or laws set by authorities (Walters, 2020). Similarly, some researchers had also defined criminal thinking as irrational or illogical thought content and cognitive processes that contribute to and play a part in the initiation and continuation of criminal behavior (Syasyila et al., 2024). Criminal thinking is often described as a dynamic and active risk factor that connects a general tendency and urge to commit offenses called “criminality” with actual criminal behavior acts known as “crime” (Walters, 2020).

RATIONALE

Materialism has been associated with several maladaptive consequences, such as, aggression, delinquency and unethical behavior, yet, very limited research studies have examined the materialism relationship with criminal thinking, particularly among young adults. Criminal thinking is considered as an important cognitive precursor to criminal behavior, therefore understanding the factors associated with it is essential for developing effective prevention strategies. Previous researches have also revealed the association among materialism and both social media addiction and low self-control. compulsive use of social media may strengthen materialistic values in an individual through frequent exposure to consumer-oriented content. Whereas self-control may protect individuals from resisting materialistic desires by regulating their impulsive behavior. Despite these findings, little research has examined the influential role of social media addiction and self-control on the relationship between materialism and criminal thinking. Moreover, within the Pakistani context there is a lack of empirical evidence examining these variables together. Therefore, the present study aims to investigate the relationship between materialism and criminal thinking and also study the moderating roles of social media addiction and self-control. The findings may contribute to the literature by providing practical implications for designing interventions to reduce criminal thinking among young adults.

OBJECTIVES

1. To examine the relationship between materialism and criminal thinking.
2. To investigate the moderating role of social media addiction in the relationship between materialism and criminal thinking.
3. To examine the moderating role of self-control in the relationship between materialism and criminal thinking

HYPOTHESIS

H1: Materialism is positively correlated with criminal thinking.

H2: Social media addiction moderates the relationship between materialism and criminal thinking.

H3: Self-control moderates the relationship between materialism and criminal thinking.

METHODOLOGY

SAMPLE

The sample for this study consisted of 340 undergraduate students enrolled in various departments and semesters of BS degree programs at the University of Peshawar and IMSciences Peshawar. Participants ranged in age from 18 to 25 years. A convenience sampling technique was used. Participation was voluntary, and informed consent was obtained prior to data collection.

INSTRUMENTS

Materialism

In this study Materialism is measured using the Material Values Scale (MVS). It is the most widely used measure of materialism as a value orientation meaning the fundamental belief regarding materialism that guides decisions and behaviors. It describes materialism as a consumer value with three components firstly including Centrality, which means considering material possessions at the center of life, secondly Happiness which is believing possessions bring life satisfaction, and lastly Success that is using possessions to signal success and convey social standing (Richins & Dawson, 1992). The scale is widely used and demonstrates strong construct validity across cultures (Ohno et al., 2022).

Criminal thinking

In this study criminal thinking was measured in university students by using The Texas Christian University Criminal Thinking Scale (TCU-CTS). It is used to measure criminal thinking patterns in individuals which are the attitudes and beliefs that support and can lead to criminal behavior. This scale is used widely in interventional and treatment settings to weigh the risks, guide interventions, and monitor change in cognitive patterns (Sease et al., 2022). The criminal thinking scale is a 36 item self-report measure and has six subscales including Entitlement which means a person deserves special treatment and rewards, Justification which means having excuses for one's own harmful behavior, Power Orientation which refers to the urge to control and dominate others, Personal Irresponsibility which means not taking responsibility for one's own actions and blaming them on others, Cold-Heartedness which refers to the lack of empathy and concern for others in a person, and Criminal Rationalization which is thinking that wrong behavior is acceptable under certain situations. (Fasanu & Osinowo, 2023)

Social media addiction

In this study social media addiction was measured in university students by using the Bergen Social Media Addiction Scale (BSMAS) (Andreassen et al., 2016). The BSMAS is the most widely used and concise tool to screen and check for problematic or addictive social media use within individuals. It is based on six main addiction components which includes salience, mood modification, tolerance, withdrawal, conflict and relapse (Shin, 2022). The Bergen Social Media Addiction Scale is a 6-item, psychometrically robust instrument that quantifies the addictive-style of social media across many languages and cultures. It is best used as a research measure of problematic social media involvement rather than a definitive diagnostic test.

Self-Control

The self-control in this study was assessed using the Brief Self-Control Scale. BSCS is one of the most widely used questionnaire to measure the trait self-control in everyday life (Tangney et al., 2004). This scale gives an idea about an individual's ability to regulate and hold back impulses, urges, resist temptation, and maintain goal-directed behavior rather than giving into instant gratifications. The scale has shown strong reliability and cross-cultural validity (Chiesi et al., 2020). Brief self-control scale originally consists of 13 items and is a 5-point Likert scale ("not at all like me" to "very much like me"), showcasing a total self-control score.

PROCEDURE:

Firstly a questionnaire measuring the materialism values, criminal thinking, social media addiction, and self-control was developed and distributed using both online through Google Forms and physical paper questionnaires between the students of University of Peshawar and Imsciences. Participants first reviewed an informed consent page online or physical form, which explained the study's purpose, voluntary participation, and confidentiality. Only those who gave the consent were let to proceed with the survey. Data collection occurred over a specified period of time, and all responses were screened to remove incomplete or inconsistent entries. Ethical approval was obtained from the relevant university ethics committee. All data were stored securely, and participants' anonymity was maintained throughout the study.

STATISTICAL ANALYSIS:

We analyzed the data of this study using SPSS (Version 26) overall. Descriptive statistics which include frequencies, percentages, means, standard deviations, and Cronbach's alpha coefficients, were computed to summarize demographic characteristics and assess the reliability of the study measures. Pearson correlation analysis was run to examine the correlational relationship between materialism values and criminal thinking among university students. Moderation analyses were performed using Hayes' PROCESS SPSS macro Model 1 (Hayes, 2022) to test the moderating roles of social media addiction and self-control separately in the relationship between materialism and criminal thinking.

RESULTS:

Table 1

Sample Demographic Characteristics

Sample Characteristics	Frequency (n=340)	Percentage (%)
Gender		
Male	170	50
Female	170	50
Age		
18-21	196	58

22-25	144	42
BS Semester		
1-4	150	44
5-8	190	56
Socio Economic Class		
Lower Class	24	7
Middle Class	290	85
Upper Class	26	8

Table 1 shows the demographics of 340 respondents: 50% male and 50% female. Age: 58% are 18-21, 42% are 22-25. All have a BS/ qualification. Socioeconomic status: 7% lower class, 85% middle class, 8% upper class.

Table 2

Psychometric Properties for Scales

Scales	No of items	M	SD	Coefficient α
SMAS	6	17.11	4.48	.65
SCS	13	39.2	6.4	.55
MVS	18	54.7	6.9	.52
CTS	36	103	14.2	.72

Note: SMA= Social Media Addiction Scale, SCS= Self Control Scale, MVS= Materialism Value Scale, CTS= Criminal Thinking Scale

Table 2 shows that The SMAS has a coefficient alpha of 0.65 which shows satisfactory reliability.

The SCS has Coefficient $\alpha = 0.55$ which is also a modest reliability. The MVS reliability is also modest ($\alpha = 0.52$) whereas CTS has reliability of ($\alpha = 0.72$) which is satisfactory.

Table 3

Pearson Correlation between Materialism scale and Criminal thinking scale

	MVS	CTS
1. MVS	1	.284**
2. CTS	.284**	1

Note. $p = 0.01$ (2-tailed). MVS = Materialism Value Scale; CTS = Criminal Thinking Scale.

Table 3 shows the Pearson correlation between the Materialism Value Scale (MVS) and the Criminal Thinking Scale (CTS). The results indicate a significant positive relationship between materialism and criminal thinking ($r = .284$, $p < .01$), suggesting that higher levels of materialism are associated with higher levels of criminal thinking among participants.

Table 4

Moderator Regression Analysis Predicting Criminal Thinking

	B	t	p	95% CI	
				Low	Up
Constant	103.69	5.37	0.000	65.7	141.65
MVS	-0.01	-0.043	.965	-0.763	0.730
SMAS	-1.59	-1.476	.1408	-3.71	0.530
MVS x SMAS	-0.03	1.84	.0663	-0.002	0.08

Note MVS= Materialism Values Scale, SMAS= Social Media Addiction Scale

Table 4 shows the moderation analysis predicting Criminal thinking where MVS is a predictor and SMAS as a moderator. In the table 10% of the variability in Criminal Thinking was predicted by all the variables, $R^2 = 0.1082$, $F = 13.5$, $P = 0.00$. It was statistically significant ($P = 0.00$) indicating that Social media addiction moderated the effect of materialism on Criminal thinking.

Table 5

Moderator Regression Analysis Predicting Criminal Thinking

	B	t	p	95% CI	
				Low	Up
Constant	123.51	4.13	0.000	64.8	182.2
MVS	-0.114	-0.191	.847	-1.292	1.062

SCS	-1.23	-1.6950	.1051	-2.73	.2600
MVS x SCS	-.0202	1.339	.1814	-.0095	.0499

Note MVS= Materialism Values Scale, SCS= Self Control Scale

Table 5 shows the moderation analysis predicting Criminal thinking where MVS is a predictor and SCS as a moderator. In the table 10% of the variability in Criminal Thinking was predicted by all the variables, $R^2 = .0978$, $F = 12.1$, $P = 0.000$. It was statistically significant ($P = 0.00$) indicating that Social media addiction moderated the relationship between Materialism and Criminal thinking..

DISCUSSION

This research explores the correlation between materialistic values and criminal thinking in young adults and the moderating effects of social media addiction and self-control on the correlational relationship. The findings overall confirmed all the proposed hypotheses, demonstrating how materialistic values and social media use behaviors and self-control regulations interconnect and impact criminal thinking among university students in Pakistan.

The findings of first hypothesis showed that there exists a positive correlation between materialistic values and criminal thinking, which confirmed the first hypothesis of the study ($r = .284$, $p < .01$). These results align with many studies that demonstrate materialism affects how people think about achieving success and how they make moral judgments according to their personal interests. For instance, people who see material wealth as the main measure of their value tend to develop instrumental thinking patterns, which make them focus on results instead of ethical matters, and this increases their risk of developing criminal thoughts (Cragg, 2026). Materialism directs people to pursue external objectives, which include accumulating wealth and material things and attaining social recognition. In Pakistan, this path leads a collectivist society to inner values of caring for their community and maintaining their moral values (Tuominen et al., 2022). People who internalize these values develop enhanced tolerance toward people who break rules because they believe that rule violations will help them achieve their material goals (Cubillos & Emmerling, 2022). People who think this way demonstrate criminal thinking because they use justification and entitlement and harmful behavior rationalization as their main belief system (Bălan, 2024; Syasyila et al., 2024). Hence, our results align with previous studies. The cultural context provides additional support for this explanation. In Pakistan, adults. In this collectivist society, material success functions as a link between family honor and social mobility and societal expectations (Shukla, 2026). Young adults face intense pressure to demonstrate their success through visible achievements in competitive educational and economic settings (Yong et al., 2026). People with materialistic goals will establish cognitive boundaries that allow them to break rules when they perceive material success is only achievable through unconventional methods (Azhar, Wel, & Hamid, 2025). Longitudinal evidence demonstrates that materialism predicts delinquent and aggressive behaviors

among adolescents and young adults. This supports this developmental and cultural interpretation (Shek et al., 2020; Lv et al., 2023).

The results of the second hypothesis affirms that social media addiction serves as a significant moderator in the relationship between materialism and criminal thinking ($R^2 = 0.1082$, $F = 13.5$, $p = 0.000$). This finding shows how digital spaces play a vital role in transforming people's values into dangerous thinking patterns, which increase their likelihood of making risky choices. Materialism and social media addiction establish a positive connection through social comparison and self-presentation and external validation processes (Khalid, 2026). People with high materialistic values show strong attraction toward social media platforms that showcase both luxurious lifestyles and consumption patterns and social status. The platforms require users to view materialistic content, which includes success stories that link wealth and visibility to achievement multiple times, which can ultimately lead to taking any path to achieve them (Koay et al., 2022). Empirical evidence shows that problematic social media usage results in criminal thinking for young people who are developing their identities and dealing with peer assessment (Gupta et al., 2024). The addictive nature of social media, which is directly related to less self-control, leads users to develop criminal thought patterns because social media platforms make users feel entitled while they lose their ability to empathize with others and stop reacting to breaches of social norms (Intravia, 2023). The psychological defense mechanisms that prevent people from thinking about deviant behavior become weaker when they observe actors who display rule-breaking behavior and succeed through questionable ethical means (Surette, 2022). The digital content that users consume for extended periods will enhance their mental frameworks, which make them believe that breaking rules has become an acceptable means to achieve their objectives (George et al., 2026). Hence, the positive correlation previous research indicates between social media addiction and materialistic values, criminal thinking, and self-control serves as supporting evidence for our results.

For hypothesis three findings revealed that, self-control functioned as a moderator enhancing the relationship between materialism and criminal thinking with more than 10% variance. ($R^2 = .0978$, $F = 12.1$, $p = 0.000$). This result indicates that people who value materialistic things usually have low self-control levels and are easily persuaded by things they are unable to resist. (Afachung et al., 2023) Low self-control levels also lead to problematic social media use and doomscrolling, which ultimately lead to problems resisting criminal or deviant thoughts (Gardner, 2023). Self-control theory maintains that people utilize their regulatory abilities to control their harmful and impulsive thoughts (Enkmann, 2026). Materialism leads to self-control loss because it makes people value immediate rewards and external benefits more, which reduces their ability to control their impulses and maintain their personal moral values (Goschke & Job, 2023; De Ridder, 2024). People in digital environments become more materialistic because they use social media excessively, which depletes their ability to control themselves and their thoughts (Zahrai et al., 2022). Hence, social control levels affect our levels of materialism, criminal thinking, and social media use and vice versa, which proves the role of self-control as a moderator. The integrative pattern of our study establishes a connection between materialism and social media addiction and criminal thinking, which the study presents as a complete psychosocial risk cluster.

This study demonstrates positive relationships among the studied variables, but researchers must recognize that existing literature contains documented alternative patterns. Some studies suggest that materialism may, under certain conditions, be channeled into socially acceptable achievement pathways, such as academic success or career advancement, rather than deviance (Donnici et al., 2021). Social media can also create positive outcomes in many cases and scenarios and not only create addiction or criminal thinking because users can manage their online activities through goal-oriented regulation (Reinecke et al., 2022). The different results that were found in this study show how important contextual factors and cultural factors are; for instance, the individual may prefer conformity and collective gains rather than individualistic desires. The criminogenic effects that materialism and social media use produce decrease when people have different combinations of moral identity and family structure and religious values and social support (Farooqi & Akram, 2024). In collectivistic cultures, strong familial oversight and moral socialization may mitigate risk by reducing centrality or self-centered materialism (Pi, 2025).

CONCLUSION:

This study showed that materialism directly relates to a higher level of criminal thinking ($r = .284$, $p < .01$), and this effect is increased or amplified by social media addiction and low self-control, accounting for nearly 10% additional variance by each individually in the cultural context of undergraduate students of a Pakistani university. These findings highlight that criminal thinking is shaped and crafted by both cultural, internal, and psychosocial factors, showing the importance of focusing on materialism values and digital behaviors among young adults to study what increases or decreases these factors in order to successfully reduce the emergence of criminogenic thought patterns in these individuals. The research showcases that materialism values and digital activities, including self-regulatory abilities, need to be addressed if we want to prevent crime-related thought patterns from developing during the emerging adulthood stage.

LIMITATIONS.

Despite the contribution and advancement this study made, it naturally has a few limitations. Firstly, the cross-sectional design of the study restrains us from the ability to conclude a causal relationship between materialism, social media addiction, self-control, and criminal thinking, which is the nature and limitation of the study design (Maier et al., 2023). Secondly, the sample was drawn using the convenience sampling technique from two universities in Pakistan, keeping in mind the resources and time limits, which may have affected the generalizability of the findings compared to other populations or cultural contexts like different provinces and cultures within Pakistan (Carra et al., 2025). Thirdly, the reliance on self-report measures naturally raises the possibility of social desirability bias that exists in young adults because they want to appear in sync with everyone and conform, which can particularly impact or affect the sensitive constructs like criminal thinking and self-control (Kelly et al., 2024). Lastly, the relatively modest reliability coefficients for the Materialism Value Scale ($\alpha = .52$) and Self-Control Scale ($\alpha = .55$) due to cultural factors may influence how respondents interpret these items and must have naturally also impacted the study. (Kanth et al., 2024).

FUTURE IMPLICATIONS:

These present research findings create important and necessary theoretical as well as practical effects for both research fields and real-world applications. Future research should consider longitudinal, which means assessing constructs across a longer period of time, or experimental designs to evaluate causal links between materialism, social media use, self-control, and criminal thinking among individuals and how they affect each other deeply (Audulv et al., 2022). In order to expand the scope of the study, further studies should also try to include diverse universities, cultures, and age groups, which can improve the generalizability and allow for cross-cultural comparisons, especially in collectivistic versus individualistic societies (Uher et al., 2025). Researchers might also explore other additional moderating variables, such as moral identity, family support, and religiosity, which could reduce or in turn increase the effects of materialism on criminal thinking (Walters, 2020). Finally, if we look from an applied perspective, the findings highlight the need for university-based interventions for students, which will address the problematic values and habits as well as traits in a person and ways to prevent and reduce them, ultimately reducing the criminal thinking (Rooney et al., 2024).

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